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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,715	08/08/2006	Nick Gruber	293581US0PCT	1157
22850 N. SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET			EXAMINER	
			LEE, EDMUND H	
ALEXANDRIA, VA 22314			ART UNIT	PAPER NUMBER
			1791	
			NOTIFICATION DATE	DELIVERY MODE
			09/17/2010	ELECTRONIC

## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com oblonpat@oblon.com jgardner@oblon.com

## Office Action Summary

Application No.	Applicant(s)	
10/588,715	GRUBER ET AL.	
Examiner	Art Unit	
EDMUND H. LEE	1791	

The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.30(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of the communication.
<ul> <li>If NO period for reply is specified above, the maximum statutory period will apply and will expire SN (6) MONTHS from the mailing date of this communication.</li> <li>Failure to reply within the set or stended period for reply will, by statel, cause the application to become ABANON-DR (30 SU) 3333.</li> <li>Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patient term adjustment. See 30 FCR 174(b).</li> </ul>
Status
1) Responsive to communication(s) filed on 06 July 2010.
2a)☑ This action is FINAL. 2b)☐ This action is non-final.
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.
Disposition of Claims
4)⊠ Claim(s) <u>1-18</u> is/are pending in the application.
4a) Of the above claim(s) 10 and 12-18 is/are withdrawn from consideration.
5) Claim(s) is/are allowed.
6)⊠ Claim(s) <u>1-9 and 11</u> is/are rejected.
7) Claim(s) is/are objected to.
8) Claim(s) are subject to restriction and/or election requirement.
Application Papers
9) The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.
Priority under 35 U.S.C. § 119
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) II b) Some * c) None of:
<ol> <li>Certified copies of the priority documents have been received.</li> </ol>
<ol><li>Certified copies of the priority documents have been received in Application No</li></ol>
3. Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
Attachment(s)

1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/GD/08) Paper No(s)/Mail Date

4) Interview Summary (PTO-413) Paper No(s)/Mail Date. \_\_ 5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_.

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## DETAILED ACTION

 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 1-9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Rockrath et al. (WO01/12736A1, corresponding to US6835420, herein "Rockrath").

With regard to claim 1, Rockrath discloses a method of making a radiation curable laminated sheet. The method comprises providing a substrate (column 19, lines 33-64), applying a top layer (clear coat film) that is curable with actinic radiation (column 4, line 7 – column 5, line 67), wherein the top layer comprises a binder with a glass transition temperature between 10 to 100°C (column 12, lines 1-4), comprising unsaturated double bonds with an average of 10.5 double per molecule (column 6, lines 49-63), and having an acid number from 0 to 15 (column 9, lines 28-51; column 11, lines 21-27). In the event that Rockrath does not anticipate the content of the ethylenically unsaturated groups or the content of the acid groups, it would have been

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obvious to one of ordinary skill in the art at the time of invention to modify the method of Rockrath by optimizing the content of the ethylenically unsaturated groups or the acid groups to obtain any of the values within the ranges suggested wherein the claimed values would be expected in order to obtain the advantages of the scratch resistant clear coat.

With regard to claim 2, Rockrath discloses the top layer (clear coat film) is transparent.

With regard to claim 3, Rockrath discloses the top layer comprises urethane (meth)acrylates (column 15, lines 47-57) and cycloaliphatic isocyanates (column 12, lines 38-60).

With regard to claim 4, Rockrath discloses the top layer comprises urethane (meth)acrylates (column 15, lines 47-57) and isophorone diisocyanate (column 13, lines 3-20).

With regard to claim 5, Rockrath discloses applying a color-imparting intermediate layer (column 5, lines 18-65).

With regard to claim 6, Rockrath discloses an aqueous basecoat based on polyesters can be applied prior to the top coat (column 19, lines 49-52).

With regard to claim 7, Rockrath discloses the composition comprises polymers having unsaturated groups and molar masses of 500 to 100000 g/mol (column 6, line 64 - column 7, line 2).

With regard to claim 8, Rockrath discloses the substrate may be PA, PE, PET, PMMA, PP, PUR, PVC or PBT among others (column 19, lines 53-64).

With regard to claim 9, Rockrath discloses the comprises no more than 10% by

weight of compound which have only one curable group (column 16, lines 30-34).

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over
   Rockrath (WO01/12736A1, corresponding to US6835420, herein "Rockrath") in view of
   Koniger et al. (WO00/63015, corresponding to US6777089, herein "Koniger").

Rockrath discloses a method of making a radiation curable laminated sheet.

Applicant is referred to paragraph 5 for a detailed discussion of Rockrath. Rockrath discloses the invention is useful in the field of automobile bodies, parts, plastic parts and any part protected by clearcoat. Rockrath does not disclose the explicit methods of producing a laminated shaped article as described in claim 11.

Koniger discloses methods of using a radiation curable composite layered sheet comprising a clear coat. The laminate of Koniger is similar to Rockrath's in that it comprises a substrate and a radiation curable clear coat. Koniger discloses the laminate may be used by adhesively bonding the laminate to a shaped article and then curing the clear coating (column 6, lines 51-60). Koniger disclose the laminate can be prepared by thermoforming, spraying the substrate with plastics material and radiation curing the clear coat (column 6, lines 61-67).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Rockrath by producing a laminated shaped article as disclosed by Koniger in order to provide a scratch resistant coating that will not crack or peel.

- Applicant's arguments with respect to claims 1-9 and 11 have been considered but are moot in view of the new ground(s) of rejection.
- The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 4855184 teaches the state of the art...
- Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the
examiner should be directed to EDMUND H. LEE whose telephone number is
571.272.1204. The examiner can normally be reached on MONDAY-THURSDAY
FROM 9AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 571.272.1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EDMUND H. LEE Primary Examiner Art Unit 1791

EHL
/EDMUND H. LEE/
Primary Examiner, Art Unit 1791